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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,474	09/19/2003	David Lee Steinlage	16630-US	8871

7590 02/24/2005

Patent Department
DEERE & COMPANY
One John Deere Place
Moline, IL 61265-8098

EXAMINER

MAMMEN, NATHAN SCOTT

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/666,474

Applicant(s)

STEINLAGE ET AL.

Examiner

Nathan S Mammen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 6, 9, 10 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 2,302,785 to Mansur.

The Mansur '785 patent discloses a deep tillage point structure adapted for connection to an upright shank 92) for forward movement. The structure comprises a main body (18) having a fore-and-aft extending leading nose with a front surface extending upwardly and rearwardly from the nose. The nose has a tapered top (see Figs. 4-5) with outwardly facing surfaces extending downwardly from an apex. The length of the apex to an uppermost rear portion (i.e., from the nose to the point marked by cross-section lines 4-4) is substantially greater than a distance equal to a maximum height of the apex (i.e., the height of 18 at cross-section 4-4). The included angle formed by the apex is obtuse. The point further includes wings (19) extending outwardly from the body and rearwardly adjacent the nose and below the apex. A substantial portion of the wings (19) lie behind the leading edge of the upright shank (see Fig. 2).

Regarding claims 6, 10: The main body has an attaching area receiving a lower mounting end (3) of the shank and including aperture for receiving a recessed bolt (22). The wings appear to have a lift angle of between 15 and 25 degrees.

Claim Rejections - 35 USC § 103

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-8, 11-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 2,302,785 to Mansur in view of U.S. Patent No. 6,443,237 to Myers et al., cited previously.

The Mansur '785 patent discloses the claimed invention, as stated in paragraph 2 above, except for the shank leading edge having a shin member, the material of construction of the tillage point, and the wings being sloped downwardly. The Myers '237 patent teaches that it is known in the art to provide a shin member (14) for fracturing the soil in front of the shank. The Myers '237 patent further teaches that it is known to construct a tillage point of austempered ductile iron (col. 3, line 15) and to slope the wings downwardly at an angle of less than 15 degrees (col. 3, lines 14-15). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the tillage point of the Mansur '785 patent with the shin member, material of construction, and angle of wings as taught by the Myers '237 patent, in order to improve the soil fracturing ability of the tillage point.

Regarding claims 2, 4-6, 8, 11-13, 15, 23, 24: The Mansur '785 and Myers '237 patent disclose or make obvious the claimed invention, as stated above. But neither the Mansur '785 nor Myers '237 patents disclose the particular angles or dimensions of the structural members. However, it would have been obvious to one having ordinary skill in the art to provide the tillage point with these angles and dimensions, since it has been held that where the general conditions

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of a claim are disclosed in the prior art (such as the arrangement of a tillage point), finding the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233 (CCPA 1955).

Response to Arguments

5. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

As state above, the Mansur '785 patent discloses the tillage point claimed in independent claims 1 and 9.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Mammen whose telephone number is (703) 306-5959. The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at (703) 308-3870. The fax number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.


Thomas B. Will
Supervisory Patent Examiner
Group 3600

NSM
2/21/05

Nathan S. Mammen